SUPPORT FOR THE AMENDMENT

This Amendment cancels Claim 4; amends Claim 2; and adds new Claim 19. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 2 is found in canceled Claim 4. Support for new Claim 19 is found in Claim 2. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 2-3, 5, 11-14, 17 and 19 will be pending in this application. Claim 2 is independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the courtesies extended to their representative during the personal interview on October 17, 2006. Applicants thank the Examiner for the indication during the interview that the above amendments appear to overcome the outstanding prior art rejection. Interview Summary dated October 17, 2006.

The present invention provides a method for producing a feed material for molten metal production. The method introduces a mixture of biomass and metal oxide-containing material into a heating furnace 3 to carbonize the biomass. The mixture containing carbonized biomass is then agglomerated and then charged into a reducing furnace 10 to obtain the feed material. Specification at Fig. 3; page 5, lines 16-20; page 6, lines 8-16; page 19, line 21 to page 20, line 2.

Claims 2-5, 11-14 and 17 are rejected under 35 U.S.C. § 103(a) over DE 35 46 261 A1 ("German '261") in view of U.S. Patent No. 6,254,665 ("Matsushita") or U.S. Patent No. 6,251,161 ("Tateishi").

German '261 discloses reducing ore using thermoplastic biomass. German '261 at abstract. German '261 discloses mixing the ore and biomass together and bricketting prior to heating to 800-900°C. German '261 at abstract.

However, German '261 is silent about forming agglomerates of ore and biomass after carbonizing the biomass. In particular, German '261 fails to suggest the independent Claim 2 limitations of "heating a mixture containing a metal oxide-containing material and biomass to carbonize the biomass in the mixture in a heating furnace ... ; then agglomerating the mixture; then charging the mixture in a reducing furnace". By agglomerating the mixture of ore and biomass after the biomass is carbonized and before charging the mixture in the reducing furnace, handling in the reducing furnace is facilitated; heat transfer in the mixture is improved to increase the reduction efficiency; and the amount of dust scattered from the reducing furnace can be decreased. Specification at page 19, line 21 to page 20, line 2.

Matsushita and Tateishi fail to remedy the deficiencies of German '261. The Office Action at page 3, lines 5-8, cites Matsushita and Tateishi for suggesting that rotary heath furnaces were well known reducing furnaces for reducing iron oxide containing feed materials.

Because the cited prior art fails to suggest all the limitations of independent Claim 2, the prior art rejections should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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